

Appl. No. 09/512,629  
Amtd. Dated November 5, 2003  
Reply to Office action of August 13, 2003  
Attorney Docket No. P12297-US1  
EUS/J/P/03-2000

### REMARKS/ARGUMENTS

#### **1.) Amendments**

The Applicants have amended Claims 1, 3, 4, 6 and 15; Claims 2 and 14 have been cancelled. Accordingly, Claims 1, 3-13 and 15-30 remain pending in the application. Favorable reconsideration of the application is respectfully requested in view of the foregoing amendments and the following remarks.

#### **2.) Allowable Subject Matter**

The Applicants thank the Examiner for the allowance of Claims 9-13 and 16-30.

#### **3.) Proposed Drawing Correction**

The Examiner objected to Figures 1 and 2 as failing to be designated as "Prior Art." The attached two (2) sheets of drawings include proposed changes to Figures 1 and 2; specifically, Figures 1 and 2 have been amended to include a "Prior Art" legend. The Applicant will submit formal drawings upon the issuance of a Notice of Allowance.

#### **4.) Examiner Objections**

The Examiner objected to Claims 14 and 15 as being of improper dependent form for failing to further limit the subject matter of a previous claim. The Applicants agree with the Examiner that Claim 14 did not limit the scope of Claim 9, from which it depended. The Applicants have cancelled Claim 14 and amended Claim 15, which

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originally depended from Claim 14, to depend from Claim 9. Accordingly, the Applicants request that the Examiner withdraw the objection to Claim 15.

#### 5.) Claim Rejections – 35 U.S.C. §112

The Examiner rejected Claims 1-8, under 35 U.S.C. §112, second paragraph, as being indefinite. The Examiner provided specific comments with respect to Claims 1, 3, 4 and 6.

With respect to Claim 1, the Applicants have amended the claim to more particularly point out and distinctly claim the subject matter regarded as the invention. The amendment of Claim 1 makes it more clear that one or more frequency hopping sequences are allocated to a cell within a telecommunications network, and that one of the frequency hopping sequences allocated to the cell is then selected for a connection associated with a mobile unit within the cell. With respect to Claims 3, 4 and 6, the Applicants have amended those claims to make it clear that the frequency hopping sequence can be a function of another parameter, as specifically recited in each of those claims. The Applicants believe the amendments to Claims 1, 3, 4 and 6 overcome the Examiner's stated reasons for rejection, and respectfully request that the Examiner withdraw the rejection of those claims as being indefinite.

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#### 6.) Claim Rejections – 35 U.S.C. §102(e)

The Examiner rejected Claims 1, 2, 7 and 8, under 35 U.S.C. §102(e), as being anticipated by United States Patent No. 6,009,332 issued to Haartsen. Anticipation requires that the disclosure of a single piece of prior art reveals every element, or limitation, of a claimed invention. Furthermore, the limitations that must be met by an anticipatory reference are those set forth in each statement of function in a claims limitations, and such a limitation cannot be met by an element in a reference that performs a different function, even though it may be part of a device embodying the same general overall concept. Haartsen fails to teach each limitation of Claims 1, 7 and 8 and, therefore, the Applicants traverse the rejection of each of those claims as being anticipated by Haartsen.<sup>1</sup>

Claim 1 recites:

1. A method for assigning a frequency hopping sequence to a mobile unit in a telecommunications network comprising the steps of:

allocating a plurality of frequency hopping sequences to a cell within the network as a function of a level of interaction between said plurality of frequency hopping sequences selected from a set of predefined frequency hopping sequences, wherein said level of interaction is a function of an intrinsic collision rate between pairs of said predefined frequency hopping sequences; and

selecting one of said plurality of allocated frequency hopping sequences for a connection associated with said mobile unit, in accordance with a frequency hopping sequence allocation strategy. (emphasis added)

<sup>1</sup> Claim 2, also rejected as being anticipated by Haartsen, has been cancelled, and the subject matter thereof has been incorporated in Claim 1.

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As noted in the Applicants' specification, neither the prior art ad-hoc or measurement-based approaches to the selection of frequency hopping sequences directly relies on the level of interaction, or "collisions," between different frequency hopping sequences.<sup>2</sup> The Applicants invention overcomes the deficiencies of the prior art by allocating a plurality of frequency hopping sequences to a cell within the network as a function of a level of interaction between the plurality of frequency hopping sequences selected from a set of predefined frequency hopping sequences. The level of interaction is a function of an intrinsic collision rate between pairs of the predefined frequency hopping sequences. That the collision rate between pairs of the predefined frequency hopping sequences is "intrinsic" means that the collision rate is determined solely on the basis of the parameters of the frequency hopping sequences, and not as a function of a measurement of actual interference within the network. In contrast, Haartsen is directed to methods that rely on interference measurements within the network.<sup>3</sup> Thus, Haartsen fails to anticipate Claim 1. Furthermore, whereas Claims 7 and 8 are dependent from Claim 1, and include the limitations thereof, Haartsen also fails to anticipate those claims. The Applicants, therefore, respectfully request that the Examiner withdraw the rejection of Claims 1, 7 and 8 as being anticipated by Haartsen.

<sup>2</sup> See Applicants' Specification, page 4, lines 16-27.

<sup>3</sup> See Haartsen, column 4, lines 6-58.

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**7.) Claim Rejections – 35 U.S.C. §103(a)**

The Examiner rejected claims 3-6, under 35. U.S.C §103(a), as being unpatentable over Haartsen in view of United States Patent No. 6,223,048 issued to Barreto, et al. The Applicants traverse the rejection of those claims.

As established *supra*, Haartsen fails to anticipate Claim 1. Barreto fails to overcome the deficiencies of Haartsen with respect to the claimed invention. Specifically, Barreto fails to disclose allocating a plurality of frequency hopping sequences to a cell within the network as a function of a level of interaction between the plurality of frequency hopping sequences selected from a set of predefined frequency hopping sequences, wherein the level of interaction is a function of an intrinsic collision rate between pairs of the predefined frequency hopping sequences. Therefore, Claim 1 is not obvious over Haartsen in view of Barreto. Whereas Claims 3-6 are dependent from Claim 1, and include the limitations thereof, those claims are also not obvious over Haartsen in view of Barreto. The Applicants, therefore, respectfully request that the Examiner withdraw the rejection of Claims 3-6 as being obvious.

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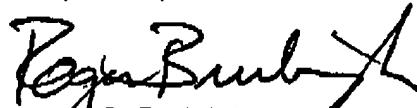
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CONCLUSION

In view of the foregoing amendments and remarks, the Applicants believe all of the claims currently pending in the Application to be in a condition for allowance. The Applicants, therefore, respectfully request that the Examiner withdraw all rejections and issue a Notice of Allowance for Claims 1, 3-13 and 15-30.

The Applicants request a telephonic interview if the Examiner has any questions or requires any additional information that would further or expedite the prosecution of the Application.

Respectfully submitted,



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